THE

EUGENICS REVIEW

EDITORIAL AND OTHER NOTES

Our first word must be one of congratulation to our Honorary President on the State recognition, tardy though it is, of the work to which he has devoted the greater part of his long life. What that work is all our readers know; we need not, therefore, stay to sum it up here. All we need say is that Sir Francis Galton, by accepting a Knighthood from his Sovereign, has, in our opinion, conferred as much honour on the Order he has recently joined as membership of that Order can possibly confer on him.

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The veteran Lord Halsbury, speaking at the luncheon given last June by the Royal Societies' Club to Lieutenant Shackleton shortly after his arrival in England from his Antarctic expedition, said that in view of what the Lieutenant and his comrades had gone through "it was impossible to believe in the supposed deterioration of the British race." Sir Francis Galton replied next day in the Times, that "exceptional performances do not contradict the supposition in question. It is not"—he continued—"that deterioration is so general that men of remarkably fine physique have ceased to exist—for they do, thank God—but that the bulk of the community is deteriorating, which it is, judging from results of inquiries into the teeth, hearing, eyesight, and mal-

formations of children in Board schools, and from the apparently continuous increase of insanity and feeble-mindedness. Again, the popularity of athletic sports proves little, for it is one thing to acclaim successful athletes, which any mob of weaklings can do, as at a cricket match; it is quite another thing to be an athlete oneself."

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In connection with this same subject, we reprint a letter which appeared in the *Times* last Derby day (May 26th) under the heading "The Derby Day and Old Age Pensions."

SIR,—Which is wrong—the breeder of race-horses or Mr. Lloyd-George? Would racing men do better with their animals if they adopted all the methods which Parliament has imposed upon us in recent years as the right way to improve the efficiency of the human race? How would it be if they swept up the whole equine progeny of the country, each generation as it came, and applied social reform to it—if they provided it with stables sanitarily inspected, if they caused all its units to pass under the hands of certified trainers, if they pensioned off the old hacks, and provided Bank holidays for the young, and, finally, if they left the whole question of the breeding of the beasts to chance? If English racing men adopted our Governmental system, is it not certain that English racehorses would be beaten everywhere by horses bred by selection? Yet no one suggests any interference with the breeding of the human race. It is only royal marriages that have to be publicly approved. My suggestion that the same kind of interference should be applied to the marriages of peers has not exactly "caught on." In their case the hereditary principle is accepted, but unscientifically applied.

Not only does Parliament in its so-called wisdom fail to apply science to the production of hereditary legislators, but in all recent social legislation it has actually penalised the fitter classes of society in the interests of the less fit. The least fit class in the country is the old people who have failed to provide any savings against their old age, and that large class of cheats who manage to pretend that they are in that case. An as yet uncounted number of millions sterling is now to be taken year after year from the fitter classes and doled out to these unfittest. No one can tell how many children that would have been born to these fitter parents will now have to go unborn. The old people used to be supported by their relations, who presumably inherited a like unfitness; those relatives, now indirectly endowed, can produce more children in place of the fitter children whose entry into the world has been blocked. All so-called social legislation tends to act in the same way. The birth-rate of the fitter is diminishing year by year, and we calmly sit by and watch the consequent degeneration of our race with idle

hands. We take the human rubbish that emerges and give it compulsory education, housing Acts, inspection of all sorts and at all seasons, at the expense of the fitter class, and imagine that better results will ensue than if we left the whole business alone. Are we right? Or are the horsebreeders right? They have demonstrably improved the race of horses, and with great rapidity. The old system of "let alone" also improved, though more slowly, the race of men. It is only the modern system of penalising the fit for the sake of the outfit that seems to be put in action simultaneously with, if it does not cause, an observed race-degeneration.

I am, Sir, yours faithfully,

MARTIN CONWAY.

That the writer of the above, Sir Martin Conway, already well known for his mountaineering feats, should thus descend into the Eugenic field, is particularly welcome, for he is not a member of our Society, and possibly had never heard of it when he wrote his letter. The views he expresses, coinciding, as they do, so remarkably with our own, are those of an outsider who has wandered far and wide, keeping his eyes open. Like Monsieur Jourdain with his prose, he talks our Eugenic language without knowing it. This is why we gladly reproduce in full what he has so well said.

UNDER this title Professor Karl Pearson has issued in a very convenient form the substance of an introduction to a course of lectures on the Science of National Eugenics The Groundwork delivered by him at the Galton Laboratory, Uniof Eugenics. versity College, Gower Street, which he now superintends and which forms his own Biometric Laboratory. We hope on a future occasion to deal fully with these lectures, which are of the greatest interest and importance; at present we have only space briefly to note one or two points. Prof. Pearson truly remarks that our power of interpreting statistics, of measuring the exact relationship between associated phenomena, has enormously increased during the last few decades, and that the dependence of characters on nurture and nature can now be measured with an ease and accuracy which were almost unknown twenty years ago. Where we venture to differ from him is in his statement that "Practical Eugenics" can only be properly discussed after we have measured the state of our knowledge and are able to estimate its relation to our existing social organisation. This seems to us much as if a man were to decline to practise floating in a swimming bath until he had ascertained by hydrostatic calculation the precise amount of water his body would displace.

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PROF. PEARSON is very emphatic that there exists no demonstrable inheritance of acquired characters. He adduces new evidence to show that environment modifies the bodily characters of the existing generation; but since it does not modify the germ plasm from which the next generation springs, we cannot hope by nurture and education to create new germinal types. Improved conditions of life, he says, mean better health for the existing population; greater educational facilities mean greater capacity for finding and using existing ability; they do not connote that the next generation will be either physically or mentally better than its parents: selection of parentage is the sole effective process known to science by which a race can continuously progress. And he winds up this part of his argument by the following striking sentence: "Loaves and the circus-wages for the unemployable and the public football match to kill time are as much signs now as of old that selection is being suspended, and that suspension undoubtedly means the rapid multiplication of the unfit at the expense of the fit." The booklet is well worth perusal from cover to cover.

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SPEAKING at University College last May on the "Principles of Eugenics" Prof. Pearson dealt with the falling birth-rate in manufacturing and other parts of the kingdom.

The Birth-rate

"We," he said, "prided ourselves as a nation on our factory legislation. We had limited the employment of women and children, and sought thereby to improve their conditions of life and health. Their environment might be better in this respect, but our legislators never once asked what the effect would be on parentage. As an instance he took the low birth-rate at Bradford. On the average every child-bearing woman in that town had only one child in ten years as against one in five sixty years ago.

"His medical friends said the reason of the change was due to the decreased economic value of the child which followed on factory legislation. Before this the child was a pecuniary asset at a very early age. It contributed to the family maintenance from the time when it was six years of age, and the economic possibility of the home was, in a certain sense, measured by the number of children in a family. That a child should be looked upon as an economic asset shocked many of them, as it shocked Lord Shaftesbury, but its condition as a pecuniary asset was not so bad as it appeared at first sight. It had to be kept in health, because it ceased to have a monetary value if it broke down.

"A Bradford doctor had assured him that before the Factory Acts more care was taken of children than was the case to-day. The mistake of most legislation was that it was carried by appeals to sentiment. Parliament had placed restrictions upon the employment of women when near child-birth, but they did not regard the matter from an economic standpoint, and did not realise that in their well-meant action they had taken a great step towards discouraging motherhood. Factory legislation swept away the possibility of a child having any economic value until it reached an age when it was near the time when it would desire to spend its earnings on itself in its own way.

"The father was handicapped in the struggle for existence as against the childless man, and the mother was handicapped, parentage being placed at a great disadvantage in the battle of life."

Prof. Pearson illustrated by diagrams the falling birthrates in such towns as Huddersfield, York, Bolton, Leeds, and Manchester, and urged the necessity, for a proper study of eugenics, of a similar return being made from every part of the kingdom. In fifteen years' time, unless some very serious change took place, we should, he said, be in precisely the same position as they were in France.

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"A KING of France, so ran the excellently moral legend, when travelling in Catalonia, had discovered an ancient man engaged unremittingly in the planting of date-kernels.

'Why,' he asked, 'do you grow the seeds of a tree of such tardy growth, seeing that the dates will not ripen till a hundred years be passed?' The answer was a noble one: 'Am I not then eating the fruit of trees planted by my forefathers, who took thought for those who were to come? And shall I not do like unto them?' The monarch was so struck by the grey-beard's devotion and industry, that he removed him and his entire family to France, and ennobled them. And the Lord Lev had seen his descendants, living as

counts at the French Court."—Gentleman Errant, by Mrs. H. Cust (Murray, 1909).

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THE President of the Immigration League of Australasia, Dr. Arthur, writing to the Westminster Gazette, points out that "the steady and increasing emigration abroad of Eugenics and our agricultural population makes for the Emigration physical deterioration of the British people." "If," he says, "the farm labourer migrates to the town this is not altogether an unmixed evil, for he tends to keep up the standard of health and physique there. But if he crosses the seas he is an irreparable loss as far as the mother-country is concerned. Those whom Great Britain can spare are the inhabitants of the congested cities, and it should be possible to arrange for tens of thousands of them to be transferred to Greater Britain and given a new start in life. Especially could this be done with regard to the young people. What is urgently needed, is an Imperial Conference between representatives of Great Britain and the selfgoverning Colonies, at which the whole problem of emigration

This appears to us to be an excellent suggestion. The Conference would furnish an admirable occasion for driving home Eugenic truths.

should be discussed and placed on a systematic basis."

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In his presidential address to the Zoological Section of the American Association for the Advancement of Science, Prof.

Wilson—(we quote again from the Westminster Gazette)—gave an excellent sketch of the present position of the specific problem of sex. After an apposite warning of the futilities into which writers may be led by the misuse of the purely relative terms "male" and "female," he referred to the general controversy as to the part played respectively by internal and external factors in sex-production. If it be true, as is asserted in the case of the honey-bee, that the fertilised eggs produce only females and the unfertilised eggs males, there was some reason for the view that internal factors do come into operation. And those who have shown that, in the case of fern prothallia, male and female organs

may be produced by changes in the conditions of nutriment or of light have had grounds for holding that sex may also be determined by extrinsic conditions. But are these really cases of sex-determination? Prof. Wilson suggests that they are rather cases of the retardation or suppression of one set of sexual organs in favour of the other in hermaphrodites. males may be produced by definite external conditions in the aphids and daphnids. But are not these changes from parthenogenetic generations producing only females to those that produce sexual females and males? And he claims that most of the recent work done in this field seems to prove that from the fertilised egg onwards the sex of the individual is unaltered by external conditions. He concludes that, so far, everything goes to show that fundamentally the process of sex production is automatic. The sexual differentiation depends on certain conditions within the fertilised egg, and we may be reasonably sure that it depends on the physiological reactions of nucleus and protoplasm. But does this bring us much further? The same may be said of any other form of heredity. The sex problem at once becomes merged in the larger one of heredity and differentiation. may fairly conclude from what has been done in recent researches that sex production is governed by a relatively simple and common process. Its basis is morphological, and although we do not yet comprehend the mode of action, nevertheless that mode is capable of accurate and experimental analysis these researches have given a new point of view for the experimental and statistical analysis of the problem. This is sufficient to encourage Prof. Wilson to express the belief and hope that the more complete solution is not now far off.

The above extract should be read in connection with Dr. Dawson's book on 'Causation of Sex' (Lewis, Gower Street).

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This year the "Union of Ethical Societies" held its fourteenth

Annual Congress and received the Report of its Social Problems

Committee. We do not always see eye to eye

with either of these bodies, but acting on

Georges Sand's principle "Je prends mon bien

où je le trouve," we have pleasure in giving publicity to the following passage from the Report with which we are in entire agreement:

"The State has a direct interest in the quality of the children born to its citizens, and the right to prevent any deterioration of the race, the causes of which are known with certainty. The law relative to marriage should therefore be so amended that licences to marry should not be granted to persons who could not show a recent satisfactory certificate of freedom from such grave defects and predispositions to disease as are definitely known to be transmissible and a cause of danger to the offspring. These, as the progress of science admits of greater certainty, should be scheduled by the State as a bar to marriage. Of equal importance is it, moreover, that the whole community should be roused to a proper sense of responsibility as to the purpose and implications of marriage. A healthier moral tone, and a wiser alertness to promote the fitness of a future race, must be fostered. Young men and women should be educated to the idea of a high physical, intellectual, and ethical standard in the selection of marriage partners, and to disregard adventitious considerations, such as wealth and social position, in making a choice so vitally important to the race. The immense pressure which social praise and blame exercise must be so directed as to interest everyone in wiser standards of marriage; then no longer will persons marry in ignorance of the full significance of their action to themselves and to society, or in any spirit of irresponsibility, or in order to secure a livelihood."

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In the Empire Review for May, Lieut.-Col. William Hill-Climo, M.D., late Brigade Surgeon, Army Medical Staff, exhibits a doleful picture of the condition of our Regular

Health of the British Army

Regular Forces, and, by inference, of the sections of the population from which our recruits are drawn.

He shows from a recent Army Medical Report that the mortality from constitutional (as distinguished from zymotic) diseases is greater in our Home Army than in any of the armies of France, Germany, Austria-Hungary, or Russia. The British Home Army had, in 1906, the largest number of cases of heart disease of all armies; and no constitutional ailment is so closely associated as this is with defective development and physical inferiority. Moreover, it would appear that heart disease is on the increase; for, in 1906, the number of rejections on account of it was 32'47 per 1,000 men inspected within three months of enlistment, whereas for the previous ten years the number was 19'42. These

figures indicate, according to Dr. Hill-Climo, extensive national decadence, the remedy for which is, he suggests, universal military training.

There can be no question that universal physical training, whether military or other, is good in itself, but breeding from sound and healthy stocks is better. It must be remembered that no training, and no nurture, can do more than realise what nature conditionally gives.